

CLAIMS

We claim:

1. Removable universal tool-holder for mounting on a straddling vineyard tractor for
5 agricultural work in tree or shrub plantations, characterized in that it consists of:

a main coupling chassis (1) constructed so that it can be mounted, in a removable
manner, on a straddling vineyard tractor (P);

two secondary coupling chassis (2A, 2B), each provided with a universal three-point
hitch system (5, 6a, 6b);

10 mechanisms (8, 11, 14) connecting each secondary coupling chassis (2A, 2B) to the
main coupling chassis (1); and

mechanisms (17, 20) that make it possible to move each secondary coupling chassis
in a vertical or approximately vertical plane and, preferably, in a horizontal or approximately
horizontal plane.

15 2. Removable universal tool-holder according to claim 1, characterized in that the
mechanisms connecting each secondary coupling chassis (2A, 2B) to the main coupling chassis (1)
comprise, for each of them, an arm (7) consisting of at least one beam (8) connected, by means of
its ends and joints at the perpendicular axes or at the crosspiece (9, 10), on the one hand, to the
20 secondary coupling chassis (2A or 2B) and, on the other hand, to the upper part and in the vicinity
of one of the sides of the main coupling chassis (1).

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3. Removable universal tool-holder according to claim 2, characterized in that the mechanisms connecting each secondary coupling chassis (2A, 2B) to the main coupling chassis (1) also consist of a connecting rod or tie rod (11) extending parallel to the beam (8) preferably above it, and constituting, with this beam, the large sides of a deformable parallelogram arranged in a vertical plane.

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4. Removable universal tool-holder according to one of the claims 2 or 3, characterized in that the pivoting movements of each carrier arm (7) in the vertical plane are obtained by means of a jack (17) arranged below the arm and connected, by means of its ends and by means of joints (18, 19), to the main coupling chassis (1) and to the beam (8).

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5. Removable universal tool-holder according to one of the claims 2 to 4, characterized in that the mechanisms connecting each secondary coupling chassis (2A, 2B) to the main coupling chassis (1) also comprise a connecting rod or tie rod (14) extending parallel to the beam (8) and laterally relative to it, this connecting rod or tie rod constituting, with the beam, the large sides of a deformable parallelogram arranged in a plane perpendicular to the vertical plane.

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6. Removable universal tool-holder according to one of the claims 2 to 5, characterized in that the pivoting movements of the carrier arm (7) in the plane perpendicular to the vertical plane are obtained by means of a jack (20) arranged laterally relative to the arm and connected, by means of its ends and by means of joints (21, 22), to the main coupling chassis (1) and to the beam (8).

7. Removable universal tool-holder according to any one of the claims 4 to 6, characterized in that the jacks (17, 20) are connected to the beam (8) and to the main coupling chassis (1) by means of ball-and-socket joints (12, 13; 21, 22).

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8. Removable universal tool-holder according to any one of the claims 1 to 7, characterized in that each secondary coupling chassis (2A, 2B) is equipped with a detector (23) oriented downwards and making it possible to control the position, relative to the ground, of the assembly comprised of this secondary coupling chassis and the machine installed on it, the detector or sensor (23) making it possible to monitor the height of this assembly by means of the electro distributor of an appropriate hydraulic circuit.

9. Removable universal tool-holder according to any one of the claims 1 to 8, characterized in that each secondary coupling chassis (2A, 2B) is equipped with a hydraulic motor (24) having an output shaft (25) that is equipped with a coupling instrument similar to the power take-off shaft of a farm tractor.

10. Removable universal tool-holder according to any one of the claims 1 to 9, characterized in that the tool-holder is provided with mechanisms (28-29; 30-31) that allow the mounting of removable stands (27A, 27B) on which it rests when it is separated from the straddling vineyard tractor.